

The first element of the project was to conduct surveys in all participating schools measuring both current practices of travel to school, as well as student and parental attitudes toward bicycling and walking to school. This chapter presents the following summary of these surveys:

- **Hand count** on mode of travel conducted in home rooms at all schools
- **Results from survey forms** distributed to all students cross tabulated by distance
- **Survey results** for Westbrook (urban) and MSAD 40 (rural) **students who live *within one mile* of school**
- **General Findings**

The survey instruments (forms) used for the hand count and the detailed written survey are also provided in **Appendix A**. Additional survey data and graphs from the PowerPoint presentation at the May 2002 public meetings are provided in **Appendix B**.

HAND COUNTS

On a fair-weather day in October 2001, teachers in participating schools asked students in their classrooms to raise their hands indicating how they came to school that day. Table 2 shows the responses of 3496 students, 63% of the students enrolled in those schools. Clearly, very few students walked or bicycled to school.

Table 2. Hand Count – All Schools

	Respondents	Percent
Number of children who skated or scootered to school today	6	<1%
Number of children who rode a bike to school today	21	<1%
Number of children who walked to school today	165	5%
Number of children who came on a school bus today	2,156	62%
Number of children who came in a motorized vehicle other than a school bus	1,148	33%

Who walked or biked to school?

In the more urban schools of **Westbrook District**,

- 8% (117) of total students walked to school
- 14% (55) of high school students walked
- 10% (60) of grade 3-8 students walked
- 0% (2) of grade K-2 students walked

In the more rural **MSAD 40** schools,

- 1% (19) of total students walked to school
- <1% (3) of high school students walked
- 1% (11) of grade 3-8 students walked
- 2% (6) of K-2 students walked

and 0% biked to school in *both* Westbrook and MSAD #40.

Similar contrasting data was observed between the individual elementary schools - although Peru Elementary is in the village district of West Peru:

In the urban **Lincoln School** in Augusta

- 12% (20) of total student respondents walked to school
- 13% (14) of grade 3-5 student respondents walked
- 10% (6) of grade K-2 student respondents walked
- 1% (2) of total student respondents biked

In the rural **Peru Elementary** school,

- 5% (9) of total student respondents walked to school
- 14% (8) of grade 3-8 student respondents walked
- 2% (1) of grade K-2 student respondents walked
- 3% (5) of total student respondents biked

SURVEY RESULTS (ALL SURVEYS)

Participating schools cooperated in either distributing a written survey that younger children took home to parents, or older children completed themselves in school with teacher supervision. Responses were received from 2670 students (a 48% return rate). The total sample was represented by the following grade groupings:

- 34% high school
- 44% grades 3 to 8
- 22% grades K-2

In order to account for the likelihood of bicycling and walking related to distance, survey results were aggregated by distance from home to school. Results were then tabulated grade level and by district. **Table 3** depicts the number of students by grade level and distance. These figures represent only students who reported both distance and grade level.

Table 3 Distance from Home-School

Grade Level	Within 1/2 Mile	Within 1 Mile	Within 5 Miles
K-2	84	185	509
3-8	120	308	902
9-12	42	130	448
Total	246	623	1859

Table 4 shows the percentage of respondents who felt students could reasonably walk/bicycle to school in the fall. Overall results are in the shaded area at the top of each column. Parents of nearly two-thirds of students in grades 3-8 who lived within 1/2 mile of school felt their child could reasonably walk, and over half of the students in those grades who lived within 1 mile. In contrast, the percentage of parents who felt their child could reasonably bicycle increased when the distance increased from 1/2 mile to 1 mile.

Table 4 Students who could reasonably walk/bicycle to school in fall

Grade Level	Within 1/2 Mile	Within 1 Mile	Within 5 Miles
	63%/38%	52%/35%	28%/24%
K-2	47%/24%	26%/13%	11%/6%
3-8	64%/43%	55%/49%	27%/25%
9-12	93%/53%	85%/59%	49%/44%

Table 5 shows that respondents in Westbrook felt students could more reasonably walk or bicycle to school than those in MSAD 40, regardless of the distance from school. Both Westbrook and MSAD 40 encompassed grades K-12. This is likely due to a safer designated pedestrian environment in an urban area.

Table 5 Students who could reasonably walk/bicycle to school in fall

District	Within 1/2 Mile	Within 1 Mile	Within 5 Miles
Westbrook	66%/38%	58%/39%	33%/26%
MSAD 40	56%/42%	40%/31%	26%/18%
Peru	58%/25%	48%/26%	24%/29%
Augusta	66%/37%	44%/25%	31%/19%

Parents of students in grades K-2 most often reported their children do not walk or bicycle because they are too young and the traffic is too heavy (Table 6). Students in grades 3-8 and 9-12 who lived no further than 1 mile from school cited cold weather as one of the top two deterrents to walking or bicycling, and high school students reported they did not walk or bicycle because they had too much to carry.

Table 6
Most frequently cited reasons student does not walk/bicycle to school

Grade Level	Within 1/2 Mile	Within 1 Mile	Within 5 Miles
K-2	Child too young (68%) Traffic too heavy (45%)	Child too young (75%) Traffic too heavy (51%)	Child too young (81%) Traffic too heavy (55%)
3-8	Cold weather (37%) Traffic too heavy (31%) Too icy (31%)	Traffic too heavy (48%) Cold weather (43%)	Too far to walk (59%) Traffic too heavy (54%)
9-12	Cold weather (57%) Too icy (45%) Too much to carry (36%)	Cold weather (55%) Too much to carry (41%) Too icy (40%)	Too far to walk (57%) Cold Weather (56%)

Table 7 shows that a large percentage of parents of K-2 children who lived within 1/2 mile of school would allow their children to walk or bicycle to school if they were accompanied by other parents, suggesting that if neighborhood parents shared this responsibility, nearly twice as many of the youngest group of students who lived within 1/2 mile might be allowed to walk or bicycle to school. Clearly parents view traffic speed as a safety hazard. Parents in all six categories listed slower traffic as a condition under which they would allow their children to walk or bicycle.

Table 8 depicts conditions that are most important to districts.

Table 7
Conditions under which students would be allowed to walk/bicycle to school

Grade Level	Within 1/2 Mile	Within 1 Mile	Within 5 Miles
K-2	Accompanied by other parents (60%) Cars slowed down (39%) Crossing guards (35%) Safety training for children (30%)	Cars slowed down (17%) Bicycle/walking paths separate from traffic (16%) Sidewalks improved or constructed (14%)	Accompanied by other parents (37%) Cars slowed down (33%) Sidewalks improved/constructed (25%) Crossing guards (25%)
3-8	Accompanied by other parents (17%) Crossing guards (17%) Safety training for children (14%) Cars slowed down (14%)	Bicycle/walking paths separate from traffic (24%) Cars slowed down (20%) Sidewalks improved or constructed (18%)	Cars slowed down (34%) Bicycle/walking paths separate from traffic (30%) Sidewalks improved or constructed (28%)

Table 8 Conditions under which students would be allowed to walk or bicycle to school

District	Within 1/2 Mile	Within 1 Mile	Within 5 Miles
Westbrook	Cars slowed down (31%) Sidewalks improved or constructed (15%) Bicycle/walking paths (13%)	Accompanied by other parents (33%) Cars slowed down (28%)	Cars slowed down (29%) Accompanied by other parents (27%) Bicycle/walking paths (25%)
MSAD 40	Sidewalks improved or constructed (34%) Accompanied by other parents (32%) Cars slowed down (32%)	Sidewalks were improved or constructed (49%) Cars slowed down (46%) Accompanied by other parents (40%)	Cars slowed down (43%) Sidewalks improved/constructed (40%) Bicycle/walking paths (37%)
Peru	Cars slowed down (33%) Accompanied by other parents (25%) There were crossing guards (25%) Sidewalks improved or constructed (25%) Bicycle/walking paths (25%)	Sidewalks were improved or constructed (48%) Cars slowed down (43%) Accompanied by other children (39%)	Cars slowed down (40%) Sidewalks improved or constructed (34%)
Augusta	Accompanied by other parents (32%) Safety training for children (29%) Crossing guards (27%) Cars slowed down (27%)	Accompanied by other parents (39%) Cars slowed down (33%) Crossing guards (31%)	Accompanied by other parents (42%) Cars slowed down (35%) Crossing guards (31%) Bicycle/walking paths (30%)

Traffic speed was mentioned in every category represented in Table 8. Crossing guards and parental supervision were in Augusta's top three conditions for students in all three "distance" categories. Sidewalk construction and improvement was a priority for parents in MSAD 40 and Peru in all three "distance" categories.

Table 9 shows that, regardless of distance, parents in Peru are more likely than parents in the other districts to allow their children to walk or bicycle to school; parents in MSAD 40 are least likely (except within 1/2 mile). Peru and MSAD 40 are both rural districts.

Table 9 Students allowed to walk or bicycle to school

District	Within 1/2 Mile	Within 1 Mile	Within 5 Miles
Westbrook	37%	32%	18%
MSAD 40	49%	27%	11%
Peru	50%	39%	33%
Augusta	56%	36%	24%

RESULTS FOR STUDENTS WHO LIVE WITHIN ONE MILE OF SCHOOL

Survey responses received from the 2670 students and parents were represented by the following grade groupings.

- 34% (911) high school
- 44% (1135) grades 3-8
- 22% (506) grades K-2

Note: Totals do not equal 2670 because in several instances grade level was not reported

Overall, 85% of parents would not allow their children in grades K-8 to walk or bike to school, yet 24% of them lived within 1 mile of school. Attitudes toward biking and walking were examined for this group because they were assumed to be the most likely candidates for walking and biking. Significant findings:

- 75% of parents of K-2 children who lived within 1 mile of school would not allow them to walk to school because they felt they were too young; the percentage dropped to 23% for grade 3-8 children
- Concerns about traffic safety were frequently mentioned, especially for kindergarten and elementary grades: K-2 (56%); 3-8 (60%); 9-12 (16%)

Target Audience - Grade 3-8 within one mile of school

Students in *grades 3-8 who lived within one mile of school* and attended the Westbrook and MSAD #40 schools were examined more closely. This grouping seemed to be the most likely to bicycle or walk to school. K-2 students were disregarded because they were considered too young. High School students (MSAD 40) were disregarded because of the regional nature of the school (the majority of students living far from school) and peer attitudes.

Significant findings are:

In Westbrook, where 31% (184) of 3-8 graders lived within 1 mile of school

- 63% of the parents in Westbrook said their child could reasonably walk to school, 49% allowed their child to walk or bicycle, but only 34% averaged walking to school at least one day a week in the fall

In MSAD 40, where 14% (69) of 3-8 graders lived within 1 mile of school,

- 58% of the parents in MSAD #40 said their child could reasonably walk, 28% allowed their child to walk or bicycle, but only 17% averaged walking to school at least one day a week in the fall

To determine the cause of this dichotomy between perception and practice, **Tables 10 and 11** were developed. They attempt to summarize survey respondent rationale for urban (Westbrook) and rural (MSAD #40) students who lived within one mile of school.

Table 10. Most Frequently Reported Reasons (Grade 3-8) Students Do Not Walk or Bike to School (other than weather)

	Urban	Rural
Traffic too heavy	38%	54%
Streets unsafe for bicycles	22%	46%
Sidewalks not adequate	20%	46%
Student has too much to carry	31%	28%
Child too young	22%	22%
Insufficient number of crossing guards	15%	30%

Table 11. Most Frequently Reported Conditions Under Which Parents Would Allow Grade 3-8 Students to Walk or Bike to School

	Urban	Rural
Sidewalks were improved or constructed	17%	52%
Cars slowed down	24%	48%
Bicycle/walking paths were separated from traffic	19%	43%
Accompanied by other parents	19%	34%
Sufficient number of crossing guards	18%	34%

Significant Finding:

Although all of these students lived within a mile of school and were at the same grade level, parents of rural students appeared more concerned about traffic safety issues than parents of urban students (71% MSAD 40 parents; 54% Westbrook parents). This may highlight the lack of adequate bicycle and pedestrian facilities in rural communities – even in neighborhoods in close proximity to schools.

Overall Findings

- When high schools are located "out in the country," students do not walk or bicycle to school.
- A large majority of parents of children in grades K-2 feel their children are too young to walk or bicycle to school without adult accompaniment, regardless of distance from school.
- Parents of Maine children in grades 3-8 in rural areas are less likely than parents of Maine children in urban areas to allow their children to walk or bicycle to school without adult accompaniment, regardless of distance from school.

- Traffic, crossing guards, and road and sidewalk conditions/construction are seen by both rural and urban parents as factors influencing their decisions to allow their children to walk or bicycle to school.
- At Lincoln School in Augusta, although the pedestrian conditions were perceived as safe there was a greater reluctance to allow children to walk without adult accompaniment.